



Zenoss Service Impact Installation Guide for Resource Manager 4.2

Release 5.1.x

Zenoss, Inc.

www.zenoss.com

Zenoss Service Impact Installation Guide for Resource Manager 4.2

Copyright © 2016 Zenoss, Inc. All rights reserved.

Zenoss and the Zenoss logo are trademarks or registered trademarks of Zenoss, Inc., in the United States and other countries. All other trademarks, logos, and service marks are the property of Zenoss or other third parties. Use of these marks is prohibited without the express written consent of Zenoss, Inc., or the third-party owner.

Flash is a registered trademark of Adobe Systems Incorporated.

Oracle, the Oracle logo, Java, and MySQL are registered trademarks of the Oracle Corporation and/or its affiliates.

Linux is a registered trademark of Linus Torvalds.

RabbitMQ is a trademark of VMware, Inc.

SNMP Informant is a trademark of Garth K. Williams (Informant Systems, Inc.).

Sybase is a registered trademark of Sybase, Inc.

Tomcat is a trademark of the Apache Software Foundation.

VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions.

Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

All other companies and products mentioned are trademarks and property of their respective owners.

Part Number: 1220.16.183

Zenoss, Inc.
11305 Four Points Drive
Bldg 1 - Suite 300
Austin, Texas 78726

Contents

About this guide.....	4
Supported clients and browsers.....	5
 Chapter 1: Planning a Service Impact deployment.....	6
Understanding Service Impact packaging.....	6
Installation requirements and recommendations.....	6
Planning an upgrade.....	7
 Chapter 2: Creating a dedicated host deployment.....	8
Preparing the Service Impact server host.....	8
Preparing the Resource Manager master host.....	10
Installing the Service Impact server.....	11
Configuring authentication.....	12
Preparing to install or upgrade Service Impact ZenPacks.....	14
Installing Service Impact ZenPacks.....	15
 Chapter 3: Creating a co-located deployment.....	17
Preparing the Resource Manager master host.....	17
Installing the Service Impact server.....	19
Preparing to install or upgrade Service Impact ZenPacks.....	20
Installing Service Impact ZenPacks.....	21
 Chapter 4: Upgrading to Service Impact 5.1.x.....	23
Installing Java 7 on the Service Impact server host.....	23
Installing Java 7 on the Resource Manager master host.....	24
Upgrading Redis on the Resource Manager master host.....	24
Upgrading the Service Impact server.....	25
Preparing to install or upgrade Service Impact ZenPacks.....	27
Upgrading Service Impact ZenPacks.....	28
 Chapter 5: Additional administrative tasks.....	30
Starting Service Impact.....	30
Stopping Service Impact.....	30
Removing Service Impact.....	30
Installing and removing ZenPacks.....	31
Configuration files.....	32
Stopping Resource Manager without remote collector or hub hosts.....	32
Stopping Resource Manager with remote collector or hub hosts.....	32

About this guide

Zenoss Service Impact Installation Guide for Resource Manager 4.2 provides detailed instructions for installing and upgrading Zenoss Service Impact (Service Impact) with a Zenoss Resource Manager (Resource Manager) version 4.2 deployment.

Audience

This guide is designed for system administrators with Zenoss Resource Manager (Resource Manager) experience. In addition, administrators need working knowledge of Linux system administration, and their data center environment.

Related publications

Title	Description
<i>Zenoss Service Impact Installation Guide for Resource Manager 5.x</i>	Describes how to install Service Impact with a Resource Manager version 5 deployment.
<i>Zenoss Service Impact Installation Guide for Resource Manager 4.2</i>	Describes how to install Service Impact with a Resource Manager version 4.2 deployment.
<i>Zenoss Service Impact User Guide</i>	Provides an overview of Service Impact architecture and features, and information about using the system.
<i>Zenoss Service Impact Release Notes</i>	Describes known issues, fixed issues, and late-breaking information not already provided in the published documentation set.

Additional information and comments

If you have technical questions about this product that are not answered in this guide, please visit the [Zenoss Support](#) site or contact Zenoss Support.

Zenoss welcomes your comments and suggestions regarding our documentation. To share your comments, please send an email to docs@zenoss.com. In the email, include the document title and part number. The part number appears at the end of the list of trademarks, at the front of this guide.

Supported clients and browsers

The client operating systems and web browser combinations supported in this release.

- All browsers must have Adobe® Flash® Player 11 installed, or a more recent version.
- Compatibility mode is not supported in Internet Explorer.

Client OS	Supported Browsers
Windows 7 and 8.1	Internet Explorer 11 (enterprise mode is supported)
	Internet Explorer 10
	Firefox 30 and above
	Chrome 30 and above
Windows Server 2012 R2	Firefox 30
	Chrome 36
Macintosh OS/X 10.9	Firefox 30 and above
	Chrome 36 and above
Ubuntu 14.04 LTS	Firefox 30 and above
	Chrome 37 and above
Red Hat Enterprise Linux 6.5, CentOS 6.5	Firefox 30 and above
	Chrome 37 and above

1

Planning a Service Impact deployment

To create a production deployment of Service Impact 5.1.x with Resource Manager 4.2.4 or 4.2.5, Zenoss strongly recommends using a separate, dedicated host for the Service Impact server and database. For development or testing use, you may deploy Service Impact on the Resource Manager master host. This chapter describes how Service Impact is packaged, and what are the resource requirements for Service Impact.

Understanding Service Impact packaging

Service Impact 5.1.x for Resource Manager 4.2.x is packaged as a server RPM file and two ZenPacks, both of which are available from the [Zenoss Support](#) site:

- The server RPM file includes the [Neo4j database](#) and the Service Impact server software. Zenoss strongly recommends installing the server on a separate, dedicated host.
- The ZenPacks, `ZenPacks.zenoss.Impact` and `ZenPacks.zenoss.ImpactServer`, are installed on the Resource Manager master host. The `ZenPacks.zenoss.Impact` ZenPack includes the `zenimpactstate` daemon, which communicates with the Service Impact server software. Both ZenPacks require customized installation and upgrade procedures, which are documented in this guide.

Installation requirements and recommendations

The Service Impact server requires a host with the following features:

- Red Hat Enterprise Linux or CentOS Linux, version 5 or 6
- 4 GB main memory
- 8 CPU cores
- 50 MB disk space for software
- 50 MB disk space for log files
- 1-20 GB disk space for database files

This release of Service Impact requires Java 1.7. The installation procedure describes how to install OpenJDK 1.7 on a dedicated Service Impact server host, and Oracle Java 1.7 for co-located deployments on a Resource Manager master host.

Note Zenoss does not recommend installing OpenJDK on a Resource Manager master host, because the installation process may inadvertently remove Resource Manager software.

Deployment strategies

Service Impact is packaged for a dedicated-host deployment, and as such, Zenoss recommends installing it on a separate, dedicated host system. In addition, installing Service Impact on a dedicated system avoids contention with Resource Manager core services and allows for improved performance.

Installing the Service Impact server on the Resource Manager master host can be appropriate for development and testing environments, and in very limited cases, production environments. If you are unsure which deployment strategy is best for your environment, consult Zenoss Support.

Zenoss also recommends choosing a network location for the Service Impact host that enables low-latency SSH and API access from the Resource Manager master host. The `zenimpactstate` daemon runs on the Resource Manager master host and communicates directly with the Service Impact server.

Optionally, you may mount a separate filesystem for the Service Impact server database.

Note Once Service Impact is installed, Resource Manager is dependent on Service Impact. If the Service Impact server is unavailable, Resource Manager continues to monitor devices, but is unable to perform modeling or properly install or remove ZenPacks.

Planning an upgrade

You may upgrade Service Impact version 4.2.6 to Service Impact version 5.1.x. To upgrade to version 4.2.6, refer to a previous release of this guide.

This release requires Resource Manager version 4.2.4, plus the most recent recommended patch set (RPS), or a more recent version of Resource Manager 4.2, and its most recent RPS. For more information about compatibility with Resource Manager, refer to the *Zenoss Service Impact Release Notes* document for this release.

For information about the files required to install or upgrade to this release, refer to the *Zenoss Service Impact Release Notes* document.

2

Creating a dedicated host deployment

This chapter describes how to install Service Impact 5.1.x on a dedicated host with Resource Manager version 4.2.4 or 4.2.5. To install Service Impact 5.1.x on the Resource Manager master host, proceed to the next chapter.

Preparing the Service Impact server host

This procedure describes how to prepare a dedicated host for the Service Impact server.

- 1 Log in to the Service Impact server host as `root`, or as a user with superuser privileges.
- 2 Configure firewall ports or disable the firewall.

You may disable the firewall now, and then configure firewall ports later.

- To configure firewall ports, see [Firewall port requirements for a dedicated host installation](#) on page 9.
- To disable the firewall, enter the following commands.

```
service iptables stop && chkconfig iptables off
service ip6tables stop && chkconfig ip6tables off
```

- 3 Disable Security-Enhanced Linux (SELinux).

- a Disable enforcing mode permanently.

```
EXT=$(date +%j-%H%M%S")
sed -i.${EXT} -e 's/^SELINUX=.*SELINUX=disabled/g' \
/etc/selinux/config
```

- b Disable enforcing mode immediately.

```
echo 0 > /selinux/enforce
```

- 4 Determine whether the OpenJDK 1.7 is installed.

```
java -version
```

- If the command returns output similar to the following, continue to the next procedure.

```
java version "1.7.0_75"
OpenJDK Runtime Environment (rhel-2.5.4.0.el6_6-x86_64 u75-b13)
OpenJDK 64-Bit Server VM (build 24.75-b04, mixed mode)
```


- If the command returns output that includes Java HotSpot (TM), remove the Java package and install OpenJDK 1.7.
- a Identify the Java package to remove.

```
rpm -qa | egrep -i '(jdk|jre)'
```

- b Remove the package.

```
yum -y remove $(rpm -qa | egrep -i '(jdk|jre)')
```

- c Install OpenJDK.

```
yum -y install java-1.7.0-openjdk.x86_64
```

- d Verify the install succeeded.

```
java -version
```

If the command returns output similar to the following, continue to the next procedure.

```
java version "1.7.0_75"
OpenJDK Runtime Environment (rhel-2.5.4.0.el6_6-x86_64 u75-b13)
OpenJDK 64-Bit Server VM (build 24.75-b04, mixed mode)
```

Firewall port requirements for a dedicated host installation

If you are installing Service Impact on a dedicated host, use the following information to configure firewall ports. When you are ready, continue with installing Service Impact.

Daemon	Port/App.	Protocol	Direction	Source/Dest.	Notes
sshd	22/SSH	TCP	IN	Resource Manager master host	Required. Used for backup, restore, and reset operations.
avahi	53/DNS	UDP	OUT	DNS server(s)	Very strongly recommended.
ntpd	123/NTP	UDP	IN/OUT	Zenoss servers, network time servers	Very strongly recommended.
snmpd	161/SNMP	UDP	IN	zenperfsnmp on Resource Manager master host	Recommended.
snmpd	162/SNMPTrap	UDP	OUT	zentrap on Resource Manager master host	Recommended.
rabbitmq	5672/AMQP	TCP	OUT	Service Impact server	Required.
redis	6379/RESP	TCP	IN	Resource Manager master host	Required.
service-impact	8080/HTTP	TCP	OUT	Service Impact server	Required.

Daemon	Port/App.	Protocol	Direction	Source/Dest.	Notes
jetty	8083/HTTP	TCP	IN/OUT	zenwebserver on Resource Manager master host, and zenhub, on any host it is present	Required. Also, any host that has ZODB access needs to use this port.
Neo4j backup	6362/HTTP	TCP	IN/OUT	zenbackup and zenrestore on Resource Manager master host	Required.

Return to [Preparing the Service Impact server host](#) on page 8.

Preparing the Resource Manager master host

This procedure describes how to prepare the Resource Manager master host for the addition of Service Impact.

- 1 Log in to the Resource Manager master host as `zenoss`.
- 2 Verify that ZenUp is installed and Resource Manager is registered.

```
zenup status
```

- If the result is `zenup: command not found`, ZenUp is not installed. Stop this procedure and install ZenUp. (For installation instructions, download *Zenoss Resource Manager Zenup Installation and Administration* from the [Zenoss Documentation](#) web page.)
- If the result looks similar to the following example, ZenUp is installed:

```
Product: zenoss-resmgr-4.2.4 (id = zenoss-resmgr-4.2.4)
Home: /opt/zenoss
Revision: 819
Updated On: Fri Feb 26 13:42:36 2016
```

The value of the `Revision` field is the recommended patch set (RPS) number.

- If the revision number is less than 819, download and install RPS 819 or greater. RPS files are available at the [Zenoss Support](#) site.
 - If the revision number is greater than 819, continue to the next procedure.
 - If the revision number is 819, perform the next step.
- 3 Optional: Determine whether the AdvancedSearch ZenPack is installed, if necessary.
The ZenPack is required, and RPS 819 does not include it.

```
zenpack --list | grep AdvancedSearch
```

- If the command returns a result, the AdvancedSearch ZenPack is installed. Continue to the next procedure.
- If the command returns no result, the AdvancedSearch ZenPack is not installed. Download the ZenPack from the [Zenoss Support](#) site, and then follow the standard ZenPack installation instructions to install it. ZenPack installation is documented in the *Zenoss Resource Manager Administration Guide*.

Upgrading Redis on the Resource Manager master host

This procedure upgrades Redis on the Resource Manager master host, which is required for compatibility with this release of Service Impact.

- 1 Log in to the Resource Manager master host as `root`, or as a user with superuser privileges.
- 2 Download the Redis RPM file.

```
mySite=http://dl.marmotte.net/rpms/redhat
myArch=el6/x86_64/redis-2.8.19-1.el6
curl -sO $mySite/$myArch/redis-2.8.19-1.el6.x86_64.rpm
```

- 3 Stop the Redis service.

```
service redis stop
```

- 4 Install the dependencies for Redis.

```
yum install glibc jemalloc
```

Note For additional information about this step, refer to [Redis installation on CentOS 6.5](#).

- 5 Install the Redis RPM.

```
rpm -Uvh redis-2.8.19-1.el6.x86_64.rpm
```

- 6 Start the Redis service.

```
service redis start
```

- 7 Check the Redis version.

```
redis-server --version
```

You should see something similar to the following.

```
Redis server v=2.8.19 sha=00000000:0 malloc=jemalloc-3.6.0 bits=64
build=9381e1411428a95a
```

- 8 Edit the Redis configuration file to enable listening for outside connections.

- a Open `/etc/redis.conf` with a text editor.
- b Locate the `bind` line, and set it to listen to non-local connections.

```
bind 0.0.0.0
```

- c Save the file, and then close the text editor.

- 9 Restart the Redis service.

```
service redis restart
```

Installing the Service Impact server

This procedure describes how to install the Service Impact server on a dedicated host.

- 1 Log in to the Service Impact server host as `root`, or as a user with superuser privileges.
- 2 Download the Service Impact server RPM file from the [Zenoss Support](#) site.
Contact your Zenoss representative for login credentials.

3 Install the Service Impact server.

```
yum -y --nogpgcheck localinstall zenoss_impact*
```

The installation process adds a new user, `zenossimpact`, and places the Service Impact server software in `/opt/zenoss_impact`.

4 Optional: Mount a separate filesystem at `/opt/zenoss_impact/var/db`, if desired.

The Service Impact server database can become very large, and filesystem performance affects the overall performance of Service Impact.

5 Start a shell as the `zenossimpact` user.

```
su - zenossimpact
```

6 Configure connection properties between the Service Impact server and Resource Manager.

a Change directory to `$IMPACT_HOME/etc`.

```
cd $IMPACT_HOME/etc
```

This directory contains the server configuration files.

b Create one variable for the fully-qualified domain name of the Resource Manager master host and another for the password of the Resource Manager admin user.

```
MASTER=Master-Host-FQDN
ADMIN=Admin-Password
```

c Edit the RabbitMQ properties file.

```
EXT=$(date +%j-%H%M%S")
sed -i.${EXT} -e '/^#amqp.host/ s/#/' \
-e '/^#amqp.host/ s/localhost/'$MASTER'/' \
./zenoss-dsa-amqpconf.properties
```

d Edit the server properties file.

```
EXT=$(date +%j-%H%M%S")
sed -i.${EXT} -e '/^#dsa.amqp.uri/ s/#/' \
-e '/^#dsa.amqp.uri/ s/localhost/'$MASTER'/' \
-e '/^#dsa.zenoss.host/ s/#/' \
-e '/^#dsa.zenoss.host/ s/localhost/'$MASTER'/' \
-e '/^#dsa.zenoss.password/ s/#/' \
-e '/^#dsa.zenoss.password/ s/=zenoss/'$ADMIN'/' \
-e '/^#redis.host/ s/#/' \
-e '/^#redis.host/ s/localhost/'$MASTER'/' \
./zenoss-dsa.properties
```

Configuring authentication

The `zenoss` user on the Resource Manager master host requires access to the Service Impact server as the `zenossimpact` user through Secure Shell (SSH). You may configure key-based authentication or password authentication to enable access (but not both).

Note When Resource Manager is started for the first time, it generates a new, unique key pair for user `zenoss` with the OpenSSH `ssh-keygen` command. All remote hosts use the same SSH key pair for user `zenoss`. For more information, refer to the *Zenoss Resource Manager Administration Guide*.

Choose one of the following authentication methods:

- [Configuring key-based access](#) on page 13
- [Configuring password access](#) on page 14

Configuring key-based access

This procedure enables communication between the Resource Manager master host and the Service Impact server host.

Note To configure password access instead of key-based access, see [Configuring password access](#) on page 14.

- 1 Log in to the Service Impact server host as `root`, or as a user with superuser privileges.
- 2 Reset the password of user `zenossimpact`.

```
passwd -uf zenossimpact
```

- 3 Start a shell as user `zenossimpact`.

```
su - zenossimpact
```

- 4 Create a new password for user `zenossimpact`.

```
passwd
```

The `passwd` command prompts you for the new password.

- 5 Create a directory and file to hold public keys.
 - a Create the directory.

```
mkdir $HOME/.ssh
```

- b Set the directory access permissions.

```
chmod 700 $HOME/.ssh
```

- c Create the file.

```
touch $HOME/.ssh/authorized_keys
```

- d Set the file access permissions.

```
chmod 600 $HOME/.ssh/authorized_keys
```

- 6 Log in to the Resource Manager master host as `zenoss`.
- 7 Copy the `zenoss` user's public key to the Service Impact server host.
 - a Copy the public key of the `zenoss` user to the server host.
Replace *Impact-Host-FQDN* with the fully-qualified domain name of the Service Impact server host:

```
cat $HOME/.ssh/id_rsa.pub | ssh -l zenossimpact Impact-Host-FQDN \
"cat - >> /home/zenossimpact/.ssh/authorized_keys"
```

The `ssh` command prompts you to confirm the connection.

- b Enter `yes`.

The `ssh` command adds the Service Impact server host to the known hosts file of the `zenoss` user on the master host, and then prompts you for the password of the `zenossimpact` user on the Service Impact server host.

- c Enter the password.

The `ssh` command invokes `cat` on the Service Impact server host to append the public key of user `zenoss` to the authorized keys file of user `zenossimpact`.

Configuring password access

This procedure enables communication between the Resource Manager master host and the Service Impact server host.

Note To configure key-based access instead of password access, see [Configuring key-based access](#) on page 13.

- 1 Log in to the Service Impact server host as `root`, or as a user with superuser privileges.
- 2 Reset the password of user `zenossimpact`.

```
passwd -uf zenossimpact
```

- 3 Start a shell as user `zenossimpact`.

```
su - zenossimpact
```

- 4 Create a new password for user `zenossimpact`.

```
passwd
```

The `passwd` command prompts you for the new password.

- 5 Log in to the Resource Manager master host as `zenoss`.
- 6 Append the following line to `$ZENHOME/etc/global.conf`. Substitute the password of the `zenossimpact` user on the Service Impact server host for *Remote-Password*.

```
impactpassword Remote-Password
```

- 7 Start a shell on the Service Impact server host as user `zenossimpact`. Substitute the fully-qualified domain name of the Service Impact server host for *Impact-Host-FQDN*.

```
ssh -l zenossimpact Impact-Host-FQDN
```

The `ssh` command prompts you to confirm the connection.

- 8 Enter `yes`.

The `ssh` command adds the Service Impact server host to the known hosts file of the `zenoss` user on the master host, and then prompts you for the password of the `zenossimpact` user on the Service Impact server host.

- 9 Enter the password.

The shell is started on the Service Impact server host.

- 10 Log out of the Service Impact server host: `exit`

Preparing to install or upgrade Service Impact ZenPacks

This procedure describes how to prepare a master host to install or upgrade Service Impact ZenPacks.

- 1 Log in to the Resource Manager master host as `zenoss`.
- 2 Download the `ZenPacks.zenoss.Impact` and `ZenPacks.zenoss.ImpactServer` ZenPack files.

The files are available from the [Zenoss Support](#) site, and the file names include version numbers. Select the files with the most recent version numbers from among the files available on the download page.

Select the following files:

- `ZenPacks.zenoss.Impact-Version-py2.egg`
- `ZenPacks.zenoss.ImpactServer-Version-py2.egg`

Note There are two versions of the `ZenPacks.zenoss.ImpactServer` ZenPack. Select the version named `ZenPacks.zenoss.ImpactServer-Version-py2.egg`.

- 3 Use one of the following procedures to stop Resource Manager.
 - [Stopping Resource Manager without remote collector or hub hosts](#) on page 32
 - [Stopping Resource Manager with remote collector or hub hosts](#) on page 32
- 4 Start the event and catalog servers.

```
zeneventserver start && zencatalogservice start
```

Note Several CRITICAL warning messages are displayed. These messages can safely be ignored.

Installing Service Impact ZenPacks

This procedure installs the Service Impact ZenPacks.

- 1 Log in to the Resource Manager master host as `zenoss`.
- 2 Install the `ZenPacks.zenoss.ImpactServer` ZenPack.

```
zenpack --install ZenPacks.zenoss.ImpactServer-*-py2.egg
```

The installation adds Service Impact attribute-value pairs to the `$ZENHOME/etc/global.conf` file.

- 3 Start the Service Impact server.
 - a Log in to the Service Impact server host as `root`, or as a user with superuser privileges.
The Service Impact server host may be the Resource Manager master host.
 - b Start the Service Impact server.

```
service zenoss_impact start
```

- c Verify the Service Impact server is started.

```
service zenoss_impact status
```

- d Log out of the Service Impact server host.

```
exit
```

- 4 Edit the `global.conf` file to specify the Service Impact server host.
Replace `Impact-Server-FQDN` with the fully-qualified domain name of the Service Impact server host:

```
myREMOTE=Impact-Server-FQDN
sed -i.bak -e '/^#impacthost/ s/#/' \
-e '/^#impacthost/ s/localhost/'$myREMOTE'/' \
/opt/zenoss/etc/global.conf
```

- 5 Install the ZenPacks.zenoss.Impact ZenPack.

```
zenpack --install ZenPacks.zenoss.Impact-*-py2.egg
```

- 6 Optional: Update the zenimpactstate configuration file with the correct port number, if necessary. Perform this step only if you have configured Redis to use a port other than the default port.
 - a Open /opt/zenoss/etc/zenimpactstate.conf in a text editor.
 - b Locate the redis-url declaration, and then change the port value. Replace *Redis-Port* with the port number you are using for Redis in your Resource Manager deployment:

```
redis-url redis://localhost:Redis-Port/0
```

- c Save the file, and then close the text editor.
- 7 Synchronize Resource Manager and Service Impact.

```
zenimpactgraph run --update
```

- 8 Optional: If you are using \$ZENHOME/etc/daemons.txt, add the zenimpactstate daemon to the file.
- 9 Start Resource Manager.

```
zenoss restart
```

- 10 Use a browser to log in to the Resource Manager browser interface, and then navigate to **Services** to confirm that the services successfully appear.
- 11 Optional: Update remote collectors, if deployed. Repeat the following steps for each remote collector.
 - a Log in to the Resource Manager user interface as a user with ZenManager or Manager privileges.
 - b Click **ADVANCED**, and then **Collectors**.
 - c Display the collector's overview page.
 - d In the **Performance Collector Configuration** panel, select **Update Collector...** from the **Action** menu.
 - e In the **Update Collector** dialog, click **OK**.
- 12 Optional: Update remote hubs, if deployed. Repeat the following steps for each remote hub.
 - a Log in to the Resource Manager user interface as a user with ZenManager or Manager privileges.
 - b Click **ADVANCED**, and then **Collectors**.
 - c Display the hub's overview page.
 - d In the **Hub Configuration** panel, select **Update Hub...** from the **Action** menu.
 - e In the **Update Hub** dialog, click **OK**.

The ZenPack installation is complete.

Next steps: Service Impact relies on a specific device production state to propagate availability and performance states within a service graph. The default production state is "Production," however, you may choose a different production state to create a service graph. For more information, refer to the *Zenoss Service Impact User Guide*.

For information about Service Impact configuration files, see [Configuration files](#) on page 32.

3

Creating a co-located deployment

This chapter describes how to install Service Impact 5.1.x on the Resource Manager 4.2.4 or 4.2.5 master host. To install Service Impact 5.1.x on a dedicated host, see the preceding chapter.

Note This deployment option is not recommended for production use.

Preparing the Resource Manager master host

This procedure describes how to prepare the Resource Manager master host for the addition of Service Impact.

- 1 Log in to the Resource Manager master host as `zenoss`.
- 2 Verify that ZenUp is installed and Resource Manager is registered.

```
zenup status
```

- If the result is `zenup: command not found`, ZenUp is not installed. Stop this procedure and install ZenUp. (For installation instructions, download *Zenoss Resource Manager Zenup Installation and Administration* from the [Zenoss Documentation](#) web page.)
- If the result looks similar to the following example, ZenUp is installed:

```
Product: zenoss-resmgr-4.2.4 (id = zenoss-resmgr-4.2.4)
Home: /opt/zenoss
Revision: 819
Updated On: Fri Feb 26 13:42:36 2016
```

The value of the Revision field is the recommended patch set (RPS) number.

- If the revision number is less than 819, download and install RPS 819 or greater. RPS files are available at the [Zenoss Support](#) site.
 - If the revision number is greater than 819, continue to the next procedure.
 - If the revision number is 819, perform the next step.
- 3 Optional: Determine whether the AdvancedSearch ZenPack is installed, if necessary. The ZenPack is required, and RPS 819 does not include it.

```
zenpack --list | grep AdvancedSearch
```

- If the command returns a result, the AdvancedSearch ZenPack is installed. Continue to the next procedure.

- If the command returns no result, the AdvancedSearch ZenPack is not installed. Download the ZenPack from the [Zenoss Support](#) site, and then follow the standard ZenPack installation instructions to install it. ZenPack installation is documented in the *Zenoss Resource Manager Administration Guide*.

Installing Java 7 on the Resource Manager master host

This procedure installs Java 7 alongside Java 6 on a Resource Manager master host. Resource Manager version 4.2.x requires Java 6, and this release of the Service Impact server requires Java 7.

Do not perform this procedure if you are upgrading a dedicated host deployment.

- 1 Log in to the Resource Manager master host as `root`, or as a user with superuser privileges.
- 2 Download the RPM file of latest Oracle Java SE Runtime Environment (7u75 or later) from [Java SE 7 Downloads](#) page.
- 3 Install the Java 7 package, except the `jexec` utility. Replace `Package_name` as necessary.

```
rpm -ivh --excludepath /etc/init.d/jexec Package_name.rpm
```

The Service Impact server does not use the `jexec` utility, so the Java 6 version can remain in place.

- 4 Set the default version for Resource Manager to Java 6.

- For Resource Manager version 4.2.4:

```
rm /usr/java/default
ln -s /usr/java/jre1.6.0_31/ /usr/java/default
```

- For Resource Manager version 4.2.5:

```
rm /usr/java/default
ln -s /usr/java/jre1.6.0_45/ /usr/java/default
```

- 5 Create a link to Java 7 for the Service Impact server, replacing `Version` with the version of the package you installed.

```
ln -s /usr/java/jre1.Version /usr/java/zenoss_impact
```

Upgrading Redis on the Resource Manager master host

This procedure upgrades Redis on the Resource Manager master host, which is required for compatibility with this release of Service Impact.

- 1 Log in to the Resource Manager master host as `root`, or as a user with superuser privileges.
- 2 Download the Redis RPM file.

```
mySite=http://dl.marmotte.net/rpms/redhat
myArch=el6/x86_64/redis-2.8.19-1.el6
curl -sO $mySite/$myArch/redis-2.8.19-1.el6.x86_64.rpm
```

- 3 Stop the Redis service.

```
service redis stop
```

- 4 Install the dependencies for Redis.

```
yum install glibc jemalloc
```

Note For additional information about this step, refer to [Redis installation on CentOS 6.5](#).

- 5 Install the Redis RPM.

```
rpm -Uvh redis-2.8.19-1.el6.x86_64.rpm
```

- 6 Start the Redis service.

```
service redis start
```

- 7 Check the Redis version.

```
redis-server --version
```

You should see something similar to the following.

```
Redis server v=2.8.19 sha=00000000:0 malloc=jemalloc-3.6.0 bits=64
build=9381e1411428a95a
```

- 8 Edit the Redis configuration file to enable listening for outside connections.

- a Open `/etc/redis.conf` with a text editor.
- b Locate the `bind` line, and set it to listen to non-local connections.

```
bind 0.0.0.0
```

- c Save the file, and then close the text editor.

- 9 Restart the Redis service.

```
service redis restart
```

Installing the Service Impact server

This procedure describes how to install the Service Impact server on the Resource Manager master host.

- 1 Log in to the Resource Manager master host as `root`, or as a user with superuser privileges.
- 2 Download the Service Impact server RPM file from the [Zenoss Support](#) site.
Contact your Zenoss representative for login credentials.
- 3 Install the Service Impact server.

```
yum -y --nogpgcheck localinstall zenoss_impact*
```

The installation process adds a new user, `zenossimpact`, and places the Service Impact server software in `/opt/zenoss_impact`.

- 4 Change the value of the `JAVA_HOME` variable that the Service Impact server uses.

```
sed -i 's|JAVA_HOME=.*$|JAVA_HOME=/usr/java/zenoss_impact|' \
/etc/default/zenoss_impact
```

- 5 Optional: Mount a separate filesystem at `/opt/zenoss_impact/var/db`, if desired.

The Service Impact server database can become very large, and filesystem performance affects the overall performance of Service Impact.

- 6 Start a shell as the zenossimpact user.

```
su - zenossimpact
```

- 7 Configure connection properties between the Service Impact server and Resource Manager.

- a Change directory to \$IMPACT_HOME/etc.

```
cd $IMPACT_HOME/etc
```

This directory contains the server configuration files.

- b Create one variable for the fully-qualified domain name of the Resource Manager master host and another for the password of the Resource Manager admin user.

```
MASTER=Master-Host-FQDN
ADMIN=Admin-Password
```

- c Edit the RabbitMQ properties file.

```
EXT=$(date +%j-%H%M%S")
sed -i.${EXT} -e '/^#amqp.host/ s/#/' \
-e '/^#amqp.host/ s/localhost/'$MASTER'/' \
./zenoss-dsa-amqpconf.properties
```

- d Edit the server properties file.

```
EXT=$(date +%j-%H%M%S")
sed -i.${EXT} -e '/^#dsa.amqp.uri/ s/#/' \
-e '/^#dsa.amqp.uri/ s/localhost/'$MASTER'/' \
-e '/^#dsa.zenoss.host/ s/#/' \
-e '/^#dsa.zenoss.host/ s/localhost/'$MASTER'/' \
-e '/^#dsa.zenoss.password/ s/#/' \
-e '/^#dsa.zenoss.password/ s/=zenoss/'$ADMIN'/' \
-e '/^#redis.host/ s/#/' \
-e '/^#redis.host/ s/localhost/'$MASTER'/' \
./zenoss-dsa.properties
```

Preparing to install or upgrade Service Impact ZenPacks

This procedure describes how to prepare a master host to install or upgrade Service Impact ZenPacks.

- 1 Log in to the Resource Manager master host as zenoss.
- 2 Download the ZenPacks.zenoss.Impact and ZenPacks.zenoss.ImpactServer ZenPack files.

The files are available from the [Zenoss Support](#) site, and the file names include version numbers. Select the files with the most recent version numbers from among the files available on the download page.

Select the following files:

- ZenPacks.zenoss.Impact-Version-py2.egg
- ZenPacks.zenoss.ImpactServer-Version-py2.egg

Note There are two versions of the ZenPacks.zenoss.ImpactServer ZenPack. Select the version named ZenPacks.zenoss.ImpactServer-Version-py2.egg.

- 3 Use one of the following procedures to stop Resource Manager.

- [Stopping Resource Manager without remote collector or hub hosts](#) on page 32
- [Stopping Resource Manager with remote collector or hub hosts](#) on page 32

- 4 Start the event and catalog servers.

```
zeneventserver start && zencatalogservice start
```

Note Several CRITICAL warning messages are displayed. These messages can safely be ignored.

Installing Service Impact ZenPacks

This procedure installs the Service Impact ZenPacks.

- 1 Log in to the Resource Manager master host as `zenoss`.
- 2 Install the `ZenPacks.zenoss.ImpactServer` ZenPack.

```
zenpack --install ZenPacks.zenoss.ImpactServer-*-py2.egg
```

The installation adds Service Impact attribute-value pairs to the `$ZENHOME/etc/global.conf` file.

- 3 Start the Service Impact server.
 - a Log in to the Service Impact server host as `root`, or as a user with superuser privileges.
The Service Impact server host may be the Resource Manager master host.
 - b Start the Service Impact server.

```
service zenoss_impact start
```

- c Verify the Service Impact server is started.

```
service zenoss_impact status
```

- d Log out of the Service Impact server host.

```
exit
```

- 4 Edit the `global.conf` file to specify the Service Impact server host.
Replace `Impact-Server-FQDN` with the fully-qualified domain name of the Service Impact server host:

```
myREMOTE=Impact-Server-FQDN
sed -i.bak -e '/^#impacthost/ s/#/' \
  -e '/^impacthost/ s/localhost/'$myREMOTE'/' \
  /opt/zenoss/etc/global.conf
```

- 5 Install the `ZenPacks.zenoss.Impact` ZenPack.

```
zenpack --install ZenPacks.zenoss.Impact-*-py2.egg
```

- 6 Optional: Update the `zenimpactstate` configuration file with the correct port number, if necessary.
Perform this step only if you have configured Redis to use a port other than the default port.
 - a Open `/opt/zenoss/etc/zenimpactstate.conf` in a text editor.
 - b Locate the `redis-url` declaration, and then change the port value.
Replace `Redis-Port` with the port number you are using for Redis in your Resource Manager deployment:

```
redis-url redis://localhost:Redis-Port/0
```

- c Save the file, and then close the text editor.

7 Synchronize Resource Manager and Service Impact.

```
zenimpactgraph run --update
```

8 Optional: If you are using `$ZENHOME/etc/daemons.txt`, add the `zenimpactstate` daemon to the file.

9 Start Resource Manager.

```
zenoss restart
```

10 Use a browser to log in to the Resource Manager browser interface, and then navigate to **Services** to confirm that the services successfully appear.

11 Optional: Update remote collectors, if deployed. Repeat the following steps for each remote collector.

- a Log in to the Resource Manager user interface as a user with ZenManager or Manager privileges.
- b Click **ADVANCED**, and then **Collectors**.
- c Display the collector's overview page.
- d In the **Performance Collector Configuration** panel, select **Update Collector...** from the **Action** menu.
- e In the **Update Collector** dialog, click **OK**.

12 Optional: Update remote hubs, if deployed. Repeat the following steps for each remote hub.

- a Log in to the Resource Manager user interface as a user with ZenManager or Manager privileges.
- b Click **ADVANCED**, and then **Collectors**.
- c Display the hub's overview page.
- d In the **Hub Configuration** panel, select **Update Hub...** from the **Action** menu.
- e In the **Update Hub** dialog, click **OK**.

The ZenPack installation is complete.

Next steps: Service Impact relies on a specific device production state to propagate availability and performance states within a service graph. The default production state is "Production," however, you may choose a different production state to create a service graph. For more information, refer to the *Zenoss Service Impact User Guide*.

For information about Service Impact configuration files, see [Configuration files](#) on page 32.

4

Upgrading to Service Impact 5.1.x

Note Zenoss recommends upgrading a development or testing environment before upgrading a production environment.

Installing Java 7 on the Service Impact server host

- 1 Log in to the Resource Manager master host as `zenoss`.
- 2 Stop Resource Manager.
 - [Stopping Resource Manager without remote collector or hub hosts](#) on page 32
 - [Stopping Resource Manager with remote collector or hub hosts](#) on page 32
- 3 Log in to the Service Impact server host as `root`, or as a user with superuser privileges.
- 4 Stop the Service Impact server, and then verify it is stopped.

```
service zenoss_impact stop
service zenoss_impact status
```

- 5 Remove the Service Impact server package.

```
rpm -e $(rpm -qa | grep zenoss_impact)
```

Note This step only removes the server software, not the database. If you have modified Service Impact configuration files, a warning message indicates that your files are being saved. These warnings can be safely ignored.

- 6 If you are upgrading Service Impact on a remote host, remove Oracle Java, and then clean up the yum caches.

Note Perform this step only if Service Impact resides on a dedicated host. Skip this step if Resource Manager and Service Impact are installed on the same host.

```
rpm -e --nodeps $(rpm -qa | grep jre)
yum clean all
```

- 7 Install OpenJDK 1.7.
 - If you are upgrading the Service Impact server on its own, dedicated host, continue with this step.
 - If you are upgrading the Service Impact server on the Resource Manager master host, skip this step and proceed to the next section.

- a Install the OpenJDK package.

```
yum -y install java-1.7.0-openjdk.x86_64
```

- b Verify the installation.

```
java -version
```

The result should be similar to the following example.

```
java version "1.7.0_75"
OpenJDK Runtime Environment (rhel-2.5.4.0.el6_6-x86_64 u75-b13)
OpenJDK 64-Bit Server VM (build 24.75-b04, mixed mode)
```

Installing Java 7 on the Resource Manager master host

This procedure installs Java 7 alongside Java 6 on a Resource Manager master host. Resource Manager version 4.2.x requires Java 6, and this release of the Service Impact server requires Java 7.

Do not perform this procedure if you are upgrading a dedicated host deployment.

- 1 Log in to the Resource Manager master host as `root`, or as a user with superuser privileges.
- 2 Download the RPM file of latest Oracle Java SE Runtime Environment (7u75 or later) from [Java SE 7 Downloads](#) page.
- 3 Install the Java 7 package, except the `jexec` utility. Replace *Package_name* as necessary.

```
rpm -ivh --excludepath /etc/init.d/jexec Package_name.rpm
```

The Service Impact server does not use the `jexec` utility, so the Java 6 version can remain in place.

- 4 Set the default version for Resource Manager to Java 6.

- For Resource Manager version 4.2.4:

```
rm /usr/java/default
ln -s /usr/java/jre1.6.0_31/ /usr/java/default
```

- For Resource Manager version 4.2.5:

```
rm /usr/java/default
ln -s /usr/java/jre1.6.0_45/ /usr/java/default
```

- 5 Create a link to Java 7 for the Service Impact server, replacing *Version* with the version of the package you installed.

```
ln -s /usr/java/jre1.Version /usr/java/zenoss_impact
```

Upgrading Redis on the Resource Manager master host

This procedure upgrades Redis on the Resource Manager master host, which is required for compatibility with this release of Service Impact.

- 1 Log in to the Resource Manager master host as `root`, or as a user with superuser privileges.
- 2 Download the Redis RPM file.

```
mySite=http://dl.marmotte.net/rpms/redhat
```



```
myArch=el6/x86_64/redis-2.8.19-1.el6
curl -sO $mySite/$myArch/redis-2.8.19-1.el6.x86_64.rpm
```

- 3 Stop the Redis service.

```
service redis stop
```

- 4 Install the dependencies for Redis.

```
yum install glibc jemalloc
```

Note For additional information about this step, refer to [Redis installation on CentOS 6.5](#).

- 5 Install the Redis RPM.

```
rpm -Uvh redis-2.8.19-1.el6.x86_64.rpm
```

- 6 Start the Redis service.

```
service redis start
```

- 7 Check the Redis version.

```
redis-server --version
```

You should see something similar to the following.

```
Redis server v=2.8.19 sha=00000000:0 malloc=jemalloc-3.6.0 bits=64
build=9381e1411428a95a
```

- 8 Edit the Redis configuration file to enable listening for outside connections.

- a Open `/etc/redis.conf` with a text editor.
- b Locate the `bind` line, and set it to listen to non-local connections.

```
bind 0.0.0.0
```

- c Save the file, and then close the text editor.

- 9 Restart the Redis service.

```
service redis restart
```

Upgrading the Service Impact server

Upgrading a dedicated host deployment

This procedure describes how to upgrade a Service Impact server that is installed on a dedicated host.

- 1 Log in to the Service Impact server host as `root`, or as a user with superuser privileges.
- 2 Download the Service Impact server RPM file from the [Zenoss Support](#) site.
Contact your Zenoss representative for login credentials.
- 3 Install the Service Impact server.

```
yum -y --nogpgcheck localinstall zenoss_impact*
```

The installation process adds a new user, `zenossimpact`, and places the Service Impact server software in `/opt/zenoss_impact`.

- 4 Start a shell as the `zenossimpact` user.

```
su - zenossimpact
```

- 5 Configure connection properties between the Service Impact server and Resource Manager.

- a Change directory to `$IMPACT_HOME/etc`.

```
cd $IMPACT_HOME/etc
```

This directory contains the server configuration files.

- b Create one variable for the fully-qualified domain name of the Resource Manager master host and another for the password of the Resource Manager admin user.

```
MASTER=Master-Host-FQDN
ADMIN=Admin-Password
```

- c Edit the RabbitMQ properties file.

```
EXT=$(date +%j-%H%M%S")
sed -i.${EXT} -e '/^#amqp.host/ s/#/' \
-e '/^#amqp.host/ s/localhost/'$MASTER'/' \
./zenoss-dsa-amqpconf.properties
```

- d Edit the server properties file.

```
EXT=$(date +%j-%H%M%S")
sed -i.${EXT} -e '/^#dsa.amqp.uri/ s/#/' \
-e '/^#dsa.amqp.uri/ s/localhost/'$MASTER'/' \
-e '/^#dsa.zenoss.host/ s/#/' \
-e '/^#dsa.zenoss.host/ s/localhost/'$MASTER'/' \
-e '/^#dsa.zenoss.password/ s/#/' \
-e '/^#dsa.zenoss.password/ s/=zenoss/'$ADMIN'/' \
-e '/^#redis.host/ s/#/' \
-e '/^#redis.host/ s/localhost/'$MASTER'/' \
./zenoss-dsa.properties
```

Upgrading a co-located deployment

This procedure describes how to upgrade a Service Impact server that is installed on the Resource Manager master host.

- 1 Log in to the Resource Manager master host as `root`, or as a user with superuser privileges.
- 2 Download the Service Impact server RPM file from the [Zenoss Support](#) site.
Contact your Zenoss representative for login credentials.
- 3 Install the Service Impact server.

```
yum -y --nogpgcheck localinstall zenoss_impact*
```

The installation process adds a new user, `zenossimpact`, and places the Service Impact server software in `/opt/zenoss_impact`.

- 4 Change the value of the `JAVA_HOME` variable that the Service Impact server uses.

```
sed -i 's|JAVA_HOME=.*$|JAVA_HOME=/usr/java/zenoss_impact|' \
```

```
/etc/default/zenoss_impact
```

- 5 Start a shell as the zenossimpact user.

```
su - zenossimpact
```

- 6 Configure connection properties between the Service Impact server and Resource Manager.

- a Change directory to \$IMPACT_HOME/etc.

```
cd $IMPACT_HOME/etc
```

This directory contains the server configuration files.

- b Create one variable for the fully-qualified domain name of the Resource Manager master host and another for the password of the Resource Manager admin user.

```
MASTER=Master-Host-FQDN
ADMIN=Admin-Password
```

- c Edit the RabbitMQ properties file.

```
EXT=$(date +%j-%H%M%S")
sed -i.${EXT} -e '/^#amqp.host/ s/#/' \
-e '/^#amqp.host/ s/localhost/'$MASTER'/' \
./zenoss-dsa-amqpconf.properties
```

- d Edit the server properties file.

```
EXT=$(date +%j-%H%M%S")
sed -i.${EXT} -e '/^#dsa.amqp.uri/ s/#/' \
-e '/^#dsa.amqp.uri/ s/localhost/'$MASTER'/' \
-e '/^#dsa.zenoss.host/ s/#/' \
-e '/^#dsa.zenoss.host/ s/localhost/'$MASTER'/' \
-e '/^#dsa.zenoss.password/ s/#/' \
-e '/^#dsa.zenoss.password/ s/=zenoss/'$ADMIN'/' \
-e '/^#redis.host/ s/#/' \
-e '/^#redis.host/ s/localhost/'$MASTER'/' \
./zenoss-dsa.properties
```

Preparing to install or upgrade Service Impact ZenPacks

This procedure describes how to prepare a master host to install or upgrade Service Impact ZenPacks.

- 1 Log in to the Resource Manager master host as zenoss.
- 2 Download the ZenPacks.zenoss.Impact and ZenPacks.zenoss.ImpactServer ZenPack files.

The files are available from the [Zenoss Support](#) site, and the file names include version numbers. Select the files with the most recent version numbers from among the files available on the download page.

Select the following files:

- ZenPacks.zenoss.Impact-Version-py2.egg
- ZenPacks.zenoss.ImpactServer-Version-py2.egg

Note There are two versions of the ZenPacks.zenoss.ImpactServer ZenPack. Select the version named ZenPacks.zenoss.ImpactServer-Version-py2.egg.

- 3 Use one of the following procedures to stop Resource Manager.

- [Stopping Resource Manager without remote collector or hub hosts](#) on page 32

- [Stopping Resource Manager with remote collector or hub hosts](#) on page 32
- 4 Start the event and catalog servers.

```
zeneventserver start && zencatalogservice start
```

Note Several CRITICAL warning messages are displayed. These messages can safely be ignored.

Upgrading Service Impact ZenPacks

This procedure upgrades the Service Impact ZenPacks.

- 1 Log in to the Resource Manager master host as `zenoss`.
- 2 Install the `ZenPacks.zenoss.ImpactServer` ZenPack.

```
zenpack --install ZenPacks.zenoss.ImpactServer-*-py2.egg
```

- 3 Start the Service Impact server.
 - a Log in to the Service Impact server host as `root`, or as a user with superuser privileges.
The Service Impact server host may be the Resource Manager master host.
 - b Start the Service Impact server.

```
service zenoss_impact start
```

- c Verify the Service Impact server is started.

```
service zenoss_impact status
```

- d Log out of the Service Impact server host.

```
exit
```

- 4 Install the `ZenPacks.zenoss.Impact` ZenPack.

```
zenpack --install ZenPacks.zenoss.Impact-*-py2.egg
```

- 5 Optional: Update the `zenimpactstate` configuration file with the correct port number, if necessary.
Perform this step only if you have configured Redis to use a port other than the default port.
 - a Open `/opt/zenoss/etc/zenimpactstate.conf` in a text editor.
 - b Locate the `redis-url` declaration, and then change the port value.
Replace `Redis-Port` with the port number you are using for Redis in your Resource Manager deployment:

```
redis-url redis://localhost:Redis-Port/0
```

- c Save the file, and then close the text editor.

- 6 Start Resource Manager.

```
zenoss restart
```

- 7 Log in to the browser interface of Resource Manager and navigate to **Services** to confirm that the services successfully appear.
- 8 Optional: Update remote collectors, if deployed. Repeat the following steps for each remote collector.
 - a Log in to the Resource Manager user interface as a user with `ZenManager` or `Manager` privileges.
 - b Click **ADVANCED**, and then **Collectors**.

- c Display the collector's overview page.
 - d In the **Performance Collector Configuration** panel, select **Update Collector...** from the **Action** menu.
 - e In the **Update Collector** dialog, click **OK**.
- 9 Optional: Update remote hubs, if deployed. Repeat the following steps for each remote hub.
 - a Log in to the Resource Manager user interface as a user with ZenManager or Manager privileges.
 - b Click **ADVANCED**, and then **Collectors**.
 - c Display the hub's overview page.
 - d In the **Hub Configuration** panel, select **Update Hub...** from the **Action** menu.
 - e In the **Update Hub** dialog, click **OK**.

5

Additional administrative tasks

Starting Service Impact

Note Resource Manager is dependent on Service Impact. Start Resource Manager after starting the Service Impact server.

- 1 Log in to the Service Impact server host as `root`, or as a user with superuser privileges.
- 2 Start the Service Impact server.

```
service zenoss_impact start
```

Stopping Service Impact

Note Resource Manager is dependent on Service Impact. Stop Resource Manager before stopping the Service Impact server.

- 1 Stop Resource Manager.
 - [Stopping Resource Manager without remote collector or hub hosts](#) on page 32
 - [Stopping Resource Manager with remote collector or hub hosts](#) on page 32
- 2 Log in to the Service Impact server host as `root`, or as a user with superuser privileges.
- 3 Stop the Service Impact server.

```
service zenoss_impact stop
```

Removing Service Impact

Note This procedure removes the Service Impact server software, but not the database.

- 1 Stop Resource Manager.
 - [Stopping Resource Manager without remote collector or hub hosts](#) on page 32
 - [Stopping Resource Manager with remote collector or hub hosts](#) on page 32
- At the end of both procedures, you are logged in to the Resource Manager master host as `zenoss`.

- 2 Start the event server and catalog service daemons.

```
zeneventserver start && zencatalogservice start
```

- 3 Remove ZenPacks.zenoss.Impact.

- a Remove the ZenPack.

```
zenpack --remove=ZenPacks.zenoss.Impact
```

The zenimpactstate daemon is removed when ZenPacks.zenoss.Impact is removed.

- b Optional: Remove the zenimpactstate daemon from \$ZENHOME/etc/daemons.txt, if necessary.

```
test -f $ZENHOME/etc/daemons.txt && \
sed -ie '/zenimpactstate/ d' $ZENHOME/etc/daemons.txt
```

- 4 Stop the Service Impact server.

- a Log in to the Service Impact server host as root, or as a user with superuser privileges.
- b Stop the server.

```
service zenoss_impact stop
```

- c Log out of the Service Impact server host.

- 5 Remove the ZenPacks.zenoss.ImpactServer ZenPack.

```
zenpack --remove=ZenPacks.zenoss.ImpactServer
```

- 6 Start Resource Manager.

```
zenoss restart
```

- 7 Determine the Service Impact server package name.

Note If you installed Service Impact on a dedicated host, log into that system as root or a user with superuser privileges. If Service Impact is co-located on the Resource Manager, you should still be logged in as root.

```
rpm -qa | grep -i impact
```

- 8 Remove the Service Impact server package, and then clean the yum caches.

```
rpm -e Package-Name
yum clean all
```

This step removes the server software, but none of the data or configuration files. You may remove those manually.

Installing and removing ZenPacks

For instructions on how to install and remove Service Impact ZenPacks, see the following sections:

- [Preparing to install or upgrade Service Impact ZenPacks](#) on page 14
- [Removing Service Impact](#) on page 30

Configuration files

Note Before you modify configuration files, Zenoss recommends that you first contact your Zenoss Support representative.

The `$IMPACT_HOME/etc` directory contains the following Service Impact server configuration files:

- `$IMPACT_HOME/etc/zenoss-dsa-amqpconf.properties`

This file contains properties for the Service Impact host's connection to the RabbitMQ Server.

- `$IMPACT_HOME/etc/zenoss-dsa.env`

This file contains the `JVM_ARGS` variable definition.

- `$IMPACT_HOME/etc/zenoss-dsa.properties`

This file contains general Service Impact configuration properties, including properties for backups, log file management, and remote debugging. The following properties assist in improving Service Impact performance:

Note This file contains additional settings that do not apply to Service Impact. Before you make changes to any of the settings in this file, contact your Zenoss Support representative.

For more information on modifying configuration files, refer to the *Zenoss Service Impact User Guide*.

Stopping Resource Manager without remote collector or hub hosts

When a Resource Manager deployment does not include remote hub or collector hosts, stopping all daemons is simple.

- 1 Log in to the Resource Manager master host as `zenoss`.
- 2 Stop all Resource Manager daemons.

```
zenoss stop
```

Occasionally, the `stop` command does not terminate all of the daemons.

- 3 Check for daemons that are not stopped.

```
pgrep -fl ${ZENHOME}
```

- If the command returns no result, Resource Manager is stopped.
- If the command returns a result, stop the remaining daemons.

```
pkill -f ${ZENHOME}
```

Stopping Resource Manager with remote collector or hub hosts

Stop all daemons on remote Resource Manager collector or hub hosts before stopping them on the master host.

- 1 Log in to the Resource Manager master host as `zenoss`.
- 2 Stop the `zenwebserver` daemon.

```
zenwebserver stop
```

- 3 Stop Resource Manager daemons on all collector hosts.

- a Log in to each collector host as zenoss.

```
ssh zenoss@Remote-Collector-Host
```

- b Stop all Resource Manager daemons.

```
zenoss stop
```

- c Check for daemons that are not stopped.

```
pgrep -fl ${ZENHOME}
```

- If the command returns no result, Resource Manager is stopped.
- If the command returns a result, stop the remaining daemons.

```
pkill -f ${ZENHOME}
```

- 4 Stop Resource Manager daemons on all hub hosts.

- a Log in to each hub host as zenoss.

```
ssh zenoss@Remote-Hub-Host
```

- b Stop all Resource Manager daemons.

```
zenoss stop
```

- c Check for daemons that are not stopped.

```
pgrep -fl ${ZENHOME}
```

- If the command returns no result, Resource Manager is stopped.
- If the command returns a result, stop the remaining daemons.

```
pkill -f ${ZENHOME}
```

- 5 Stop all Resource Manager daemons on the master host.

- a Log in to the Resource Manager master host as zenoss.

- b Stop all Resource Manager daemons.

```
zenoss stop
```

- c Check for daemons that are not stopped.

```
pgrep -fl ${ZENHOME}
```

- If the command returns no result, Resource Manager is stopped.
- If the command returns a result, stop the remaining daemons.

```
pkill -f ${ZENHOME}
```